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## Meeting Report:

Location: EPA Region I, Boston MA

Subject: NCBC Davisville/NETC Newport Ecological Risk

Date: Sept. 5, 1991

Agencies Represented:

EPA Region I: Superfund Fed. Facilities Remedial Proj. Mang.

EPA Region I: Environmental Services Division

EPA Region I: Superfund Ecological Assessment Team

EPA Region I: Federal Programs

Rhode Island Dept. of Environmental Management

US Fish and Wildlife

NORTHERN DIVISION

NCBC Davisville

NETC Newport

TRC ECS (Navy Contractor)

Alliance Tech. (Navy Contractor)

CDM (EPA Contractor)

**EPA-ERLN** 

**NOSC** 

Synopsis of Meeting:

Carol Keating, EPA Region I RPM for Davisville and Newport, opened the meeting by giving a overview of EPA Region I's ecological risk program for superfund. The Region has formed an ecological risk assessment work group to develop guidance for conducting ecological risk assessments. She passed out copies of the latest documents (encls (1) and (2)) providing guidance for ecological risk assessments. EPA stressed that the actual ecorisk will be very site specific while the "guidance is generic" in nature. Within EPA and especially within Region I there is a shift to emphasize environmental effects and because Federal Facilities are much larger than "normal" superfund sites they will be targeted for more focused ecological risk assessments. Federal Facilities have numerous sites, encompass wide areas which usually have diverse ecological habitats (wetlands, uplands, aquatic resources, etc.), as well as restricted public access and therefore will require more information on ecological effects to determine appropriate cleanup levels.

The ecological characterization should consist of site specific data that is collected in a stepwise approach. It will be necessary to identify appropriate ARARs (ie 404 CWA if wetlands are present), the habitat(s) and potential receptors must be evaluated which will require -- at a minimum a "trained biologist to develop habitat profiles". The USFWS will mainly will be interested in endangered species, migratory birds, anadromous fish and cultural heritage resources, but will also be concerned about habitat degradation in general.

It was agreed that the big question is what types of tests to use and how does one decide? Current guidance suggests that screening tests should be conducted that could consist

of a variety of acute and chronic endpoints. There was a general agreement on what must be done, but some disagreement on selecting the appropriate methods and approaches to be used, especially analytical methods, as there are currently no EPA-approved methods capable of achieving the detection limits in tissues and sediments necessary for conducting ecological risk assessments. The real question for the Navy is that given ecorisk is an evolving science how will the toxicity tests, chemistry data, and natural history analysis satisfy CERCLA requirements? When is enough testing enough? Especially when new tests and procedures will continue to be developed. And how will the information be used to establish cleanup levels? Additional discussion centered on what are acceptable "background" and "reference" sites. In EPA terminology background refers to levels at uncontaminated locations at the site and reference refers to areas that are not influenced by the Superfund site -- although it is very hard to determine what other pollution sources may have contributed to the problem. This could become a very sticky issue if the Navy is required to cleanup to comparable "reference" areas and yet there still is significant pollution impact from other sources (i.e. marinas, runoff, etc.).

The Davisville project was discussed and the EPA outlined what they expected for the terrestrial side of the ecorisk question. EPA indicated that they felt very comfortable with the marine ecological risk assessment being conducted by NOSC and ERLN (although there are some additional questions which must also be address such as food-chain accumulation and other commercially important species), but that the technical data and information from the marine ecorisk needs to be incorporated into a final ecological risk assessment for NCBC Davisville. There are 3 main areas for combining the marine and terrestrial ecorisk assessments: (1) setting up a long term monitoring network that includes the bay, harbor, surface, and groundwater for analities, locations, frequency, and duration, (2) cooperating with toxicity assessments, especially if contaminated material from the landfill will be collected for testing, and (3) coordinating the development of the final ecological risk assessment.

The offshore work for Newport was briefly discussed. EPA Region rejected the scope of work developed by Battele for conducting the offshore sampling because the sampling scheme was inadequate and the proposed methods and holding times did not meet EPA Region I guidance (encl. (3)), even though the methods and procedures meet the requirements for NOAA's Status and Trends, EPA's EMAP, and ACOE's Greenbook programs. This illustrates a very important point that a new approach to QA/QC needs to be developed that will recognize the data quality objectives for conducting ecorisks (low detection, salt water, tissue matrix, etc.). That is why NOSC/ERLN are developing a performance-based QA/QC package for the Portsmouth study. This package, currently under review by EPA, basically uses QA procedures that are demonstrated by performance analyses of standard reference materials to determine accuracy and quality. How this is implemented may have a wideranging impact on how site investigations and data analysis are conducted for superfund/CERCLA ecological risks.

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NCBC/NETC Eco-Risk Scoping Meeting September 5,1991 Boston, MA

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